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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER			WANG, SHENGJUN	
LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			ART UNIT	PAPER NUMBER
			1617	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)		
		09/759,165	DOUIN ET AL.		
	Office Action Summary	Examiner	Art Unit		
		Shengjun Wang	1617		
Period fo	The MAILING DATE of this communica or Reply	ation appears on the cover sh	eet with the correspondence a	ddress	
A SH WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAI assions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum statute to reply within the set or extended period for reply will reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	LING DATE OF THIS COMM 37 CFR 1.136(a). In no event, however, ication. ory period will apply and will expire SIX ( I, by statute, cause the application to bed	MUNICATION. may a reply be timely filed  (6) MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133).		
Status					
	Responsive to communication(s) filed This action is <b>FINAL</b> . 2b Since this application is in condition for closed in accordance with the practice	) This action is non-final. r allowance except for forma	· •	ne merits is	
Dispositi	on of Claims				
5)□ 6)⊠ 7)□ 8)□ <b>Applicat</b> i	Claim(s) 1-69 is/are pending in the app 4a) Of the above claim(s) 4-17,19-24,2 Claim(s) is/are allowed. Claim(s) 1-3,18,25,28,38,39 and 43-58 Claim(s) is/are objected to. Claim(s) are subject to restriction Papers The specification is objected to by the E	6,27,29-37,40-42 and 59-69 is/are rejected. on and/or election requireme Examiner.	nt.	eration.	
_	The drawing(s) filed on is/are: a Applicant may not request that any objection Replacement drawing sheet(s) including the the oath or declaration is objected to be	on to the drawing(s) be held in a ne correction is required if the dr	abeyance. See 37 CFR 1.85(a). rawing(s) is objected to. See 37 C		
Priority (	ınder 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
2) Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTC nation Disclosure Statement(s) (PTO-1449 or PT r No(s)/Mail Date	)-948) Pap	rview Summary (PTO-413) er No(s)/Mail Date ice of Informal Patent Application (PT er:	<sup>-</sup> O-152)	

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## **DETAILED ACTION**

Receipt of applicants' remarks, and the 132 declaration submitted September 13, 2005 is acknowledged.

## Claim Rejections - 35 U.S.C. 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3, 18, 25, 28, 38, 39, and 43-58 rejected under 35 U.S.C. 103(a) as being unpatentable over Sweger et al. (US patent 5,482,704, or record), in view of Matsumoto et al. (U.S. Patent 6,010,689) and Uchiyama et al. (US Patent 5,876,705).
- 3. Sweger teaches a hair compositions containing amino-multicarboxylate modified starch. See the claims. Example 1 illustrates a starch modified with 2-chloroethylaminodipropionic acid (CEPA) (see col. 6, line 44 through col. 7, line 10). The starch derivatives provide thickening and emulsion stabilization and exhibit good appearance and feel to the skin (see col. 1, lines 32-37, col. 9, lines 60-63). The reference teaches that polyacrylic acid polymers such as Carbopol resins are the leading thickeners and emulsion stabilizers in the skin care and hair care markets. The reference further teaches that CEPA-modified starch gives stable viscosity over time and is superior to the Carbopol@ standard (see col. 9, lines 1-6).
- 4. Sweger does not teach expressly the other ingredients in the hair composition, such as conditioning agent behenyltrimethylammonium, or anionic surfactant alkyl ether sulfate.

However, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to use hair conditioning agents, and surfactants because those are well known essential ingredients normally used for hair compositions. For example, Matsumoto et al. teaches that behenyltrimethylammonium is a well-known hair conditioning agent, and alkyl ether sulfate are anionic surfactant known to be useful in hair composition. See, particularly, column 2, line 13 to column 3, line 36, column 5, lines 28-50, and column 7, lines 13-65. Uchiyama et al. teaches that a conditioning shampoo composition may comprise anionic surfactant, conditioning agent, such as behenyltrimethylammonium and thickener. See, particularly, the claims, and column 22, lines 34-55. Further, The optimization of a result effective parameter, e.g., optimal amounts of each known ingredients in a cosmetic composition, or a proper pH, is considered within the skill of the artisan. See, In re Boesch and Slaney (CCPA) 204 USPQ 215.

- 5. Claims 1-3, 18, 25, 28, 38, 39, and 43-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janchipraponvej (US Pat. 4,954,335) in view of Sweger et al (US Pat. 5,482,704) and Martino et al (US Pat. 6,210,689) and in further view of Uchiyama et al.
- 6. Janchipraponvej teaches clear conditioning compositions and methods to impart improved properties to hair. The compositions provide excellent wet comb and dry comb properties to the hair, and the hair demonstrates improved physical and cosmetic properties (see col. 7, lines 21-48). The compositions of Janchipraponvej contain quaternary ammonium compounds (see col. 8, line 8-47). Behenyltrimethylammonium chloride is specifically taught (see col. 10, lines 1-29). Weight percentages of the quaternary ammonium compound are taught (see col. 10, lines 30-45). The reference teaches the use of thickening agents such as polyacrylic

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acid derivatives, and that the resulting compositions are relatively viscous compositions that are

stable to phase separation for an indefinite period of time (see col. 16, lines 9-32). A preferred

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range of pH from 5.5 to 6.5 is taught (see col. 14, lines 5-18). Additional surfactants are included

in the composition (see col. 14, line 19 through col. 15, line 18). The reference lacks modified

starch and anionic surfactants.

7. Sweger teaches cosmetic compositions containing amino-multicarboxylate modified

starch. Example 1 illustrates a starch modified with z-chloroethylaminodipropionic acid (CEPA)

(see col. 6, line 44 through col. 7, line 10). The starch derivatives provide thickening and

emulsion stabilization and exhibit good appearance and feel to the skin (see col. 1, lines 32-37.,

col. 9, lines 60-63). The reference teaches that polyacrylic acid polymers such as Carbopoll

resins are the leading thickeners and emulsion stabilizers in the skin care and hair care markets.

The reference further teaches that CEPA-modified starch gives stable viscosity over time and is

superior to the Carbopol@ standard (see col. 9, lines 1-6). Sweger et al. further teaches that the

CEPA-modified starch may be used together with other ionic or non-ionic surfactants. See,

particularly, col. 4, line 39 to col. 5, line 13.

8. Martino teaches the use of alkyl ether sulfate salts as well know surfactants in cosmetic

formulations (see col. 5, lines 1 1-26). The reference teaches that certain alkyl ether sulfate salts

are particularly useful in combination with keratin treating cosmetic compositions containing

amphoteric starch derivatives as disclosed in the reference (see abstract and col. 5, lines 16-17).

Uchiyama et al. teaches that a conditioning shampoo composition may comprise anionic

surfactant, conditioning agent, such as behenyltrimethylammonium and thickener. See,

particularly, the claims, and column 22, lines 34-55.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the compositions of Janchipraponvej by the addition of amphoteric starches as taught by Sweger and anionic surfactants as taught by Martino in order to benefit from the improved results of the amphoteric starches with respect to viscosity and thickening as taught by Sweger.

## Response to the Arguments

Applicants' remarks and the declaration under 37 C.F.R. 1.132 have been fully considered.

The remarks and the declaration are persuasive to claimed subject matter wherein the amphoteric stanch is those of formula (I), and wherein R' is hydrogen or methyl group. The subject matter is allowable because of the unexpected benefit shown in the declaration.

The pending claims are properly rejected as the claimed subject matter does not commensurate in scope with the unexpected benefit shown in the declaration. Regarding the establishment of unexpected results, a few notable principles are well settled. the claims must be commensurate in the scope with any evidence of unexpected results. See MPEP 716.02 (d). The declaration shows the combination of potato starch modified with 2-chloroethylaminodipropionic acid and the cationic surfactant herein provide some benefit in treating hair. However, the declaration fails to provide support for other modified starch encompassed herein having distinct structural features from the potato starch modified with 2-chloroethylaminodipropionic acid.

Applicants' remarks regarding the rejections set forth above are unpersuasive.

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The rebuttal arguments presented in the prior office action are reiterated herein.

Applicants state that the primary reference (Sweger) admittedly fails to teach conditioning agents or anionic surfactant." The statement is incomplete and misleading. Sweger et al. do not teach expressly conditioning agents or anionic surfactant. However, Sweger have fairly suggested the conditioning agents or anionic surfactant. Note, Sweger et al. claimed a cosmetic skin care or hair care composition comprising the modified starch, and without further limitation as to the requirements of conditioner or surfactants presented therein. Therefore, a hair care composition comprising the modified starch with other known conditioner and surfactants would have been

within the scope of Sweger's hair care composition. Applicants' assertion that the examiner erred

in picking and choosing and the citation of In re Wesslau are deemed improper. The issue of

picking and chose only arises when the particular combination shows unexpected or unobvious

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benefit that residing in the combination. In Wesslau, the particular catalysts product produced narrow distribution of the molecular weight, which was not teach or suggested by the cited arts. Therefore, the court states: "The fallacy of this reasoning is that no one of the references suggests such a substitution, quite apart from the result which would be obtained thereby." (emphasis added). In the instant situation the claimed invention provide no benefits that is not taught by the reference or is not obvious over the references.

9. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicants contend that the rejections based on the faulty logic. The examiner disagrees. The employment of well-known cosmetic ingredients in a cosmetic composition would have been obvious absent evidence to the contrary. Applicant further argue that, following the rationale in the rejection, The Cosmetic Ingredient Dictionary and Handbook could be used to defeat patentability of almost all cosmetic *inventions* by its listing of ingredients and properties. The examiner fails to see how applicants come to this conclusion. An invention, which provides a utility, and unobvious benefit to the prior art, could not be defeated by the handbook. On the other hand, absent a clear utility, an unobvious benefit, any of the combinations of the listed ingredients could be defeated by the Handbook for patentability. The public has every right to use the ingredients and any of their combinations, absent evidence to the contrary.

10. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teaching, suggestion and motivation are found both in the cited references and in the knowledge generally available to one or ordinary skill in the art.

Particularly, the employment of the cationic surfactant herein is obvious because such surfactants are well known essential ingredients normally used for hair compositions (see the rejection set forth above). Wesslau is misplaced in this situation for reasons discussed in the prior office action. In re Rouffet provides no help to applicant's position. In Rouffet, the two prior arts and/or

the knowledge generally available to one of ordinary skill in the art fail to provide motivation to combine the two references. The cited motivation "[t]he level of skill in the art is very high" is not a valid motivation. Contrary to Rouffet, the cited references and the general knowledge available to one of ordinary skill in the art provide clear teaching and motivation to reach claimed subject matter.

11. Rejections over Janchipraponvej (US Pat. 4,954,335) in view of Sweger et al (US Pat. 5,482,704) and Martino et al (US Pat. 6,210,689) and in further view of Uchiyama et al. are maintained

Regarding these rejections the examiner repeats that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Princeton emphasizes in considering the claimed invention as a whole, not considering each cited reference separately. The cited references provide a clear motivation to add the amphoteric starch to the compositions of Janchipraponvej in order to benefit from the improved results of the amphoteric starches with respect to viscosity and thickening as taught by Sweger.

12. The examiner maintained that a prima facie case of obviousness has been established, and the only way to rebut the obviousness is objective evidence of non-obviousness, which the examiner has not found in the application. Further, considered the cited references as a whole, the alleged teach away, i.e., not to use cationic compound with anionic surfactant would have not considered a teach away. Particularly, Uchiyama et al. teaches that at the time the claimed

invention was made, it is known to use anionic surfactant with cationic compound in shampoo conditioning composition. See the rejection above.

13. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. This application contains claims 4-17, 19-24,26,27,29-34,40-42 and 59-69 drawn to an invention nonelected with traverse in Paper submitted December 17, 2001. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shengjun Wang Primary Examiner Art Unit 1617